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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------|----------------------|-------------------------|------------------|
| 10/052,518 | 01/23/2002 | Kazuma Sekiya | 33773M033 | 4965 |
| 441 | 7590 08/14/2003 | | | |
| SMITH, GAMBRELL & RUSSELL, LLP | | | EXAMINER | |
| 1850 M STREET, N.W., SUITE 800 WASHINGTON, DC 20036 | | | ELEY, TIMOTHY V | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3724 | |
| | | | DATE MAILED: 08/14/2003 | 3 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| · · · · · · · · · · · · · · · · · · · | Application No. | Applicant(s) | | | | |
|---|---------------------------------|--|--|--|--|--|
| | | | | | | |
| Office Action Summary | 10/052,518 | SEKIYA, KAZUMA | | | | |
| Office Action Guilliary | Examiner | Art Unit | | | | |
| Th MAILING DATE of this communication app | Timothy V Eley | a green address | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1) Responsive to communication(s) filed on | <u> </u> | | | | | |
| 2a)☐ This action is FINAL . 2b)⊠ Thi | s action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4) Claim(s) 1-8 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-8</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | · | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>23 January 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | priority amade of cicio. 3 | (4) (4) (1). | | | | |
| 1.⊠ Certified copies of the priority documents | s have been received. | | | | | |
| 2. Certified copies of the priority documents | | cation No. | | | | |
| Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) 🔲 Notice of Inform | nary (PTO-413) Paper No(s) nal Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kramer'435 et al.

Kramer et al disclose a method of detachably mounting a rotating tool to a mounting portion, the mounting portion either having a cylindrical outer circumferential surface(figure 4) or a cylindrical inner circumferential surface(figure 1) by either heating or cooling the mounting portion, or heating or cooling the tool whereby the tool is secured to the mounting portion. See column 1, lines 49-52, which would indicate that the mounting portion or the tool is made from metal(claims 2,3,5, and 7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art(APA) in view of Kramer'435 et al.

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The APA discloses a rotating tool mounted to a spindle wherein the rotating tool comprises a metal hub and a thin annular metal cutting blade secured to the hub, the cutting blade containing diamond grains. See pages 1 and 2, in applicant's "Description of the Prior Art".

The APA does not disclose mounting the tool to the mounting potion of the spindle by either heating or cooling the mounting portion, or heating or cooling the tool.

Kramer et al, as indicated above, disclose a method of detachably mounting a rotating tool to a mounting portion, the mounting portion either having a cylindrical outer circumferential surface(figure 4) or a cylindrical inner circumferential surface(figure 1) by either heating or cooling the mounting portion, or heating or cooling the tool whereby the tool is secured to the mounting portion.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of the APA by detachably mounting the tool to the mounting portion, the mounting portion either having a cylindrical outer circumferential surface(figure 4) or a cylindrical inner circumferential surface(figure 1) by either heating or cooling the mounting portion, or heating or cooling the tool whereby the tool is secured to the mounting portion, as taught by Kramer et al, in order to better secure the tool to the spindle.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art discloses using memory alloys for joining to elements together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy V Eley whose telephone number is 703-308-1824. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N Shoap can be reached on 703-308-1082. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

tve

August 10, 2003

Jimothy V Eley Primary Examiner Art Unit 3724 Page 4